

A' N terminus up to residue 164 of SEQ ID NO:1. Herein the P/VDH of PDGF-C is defined as truncated PDGF-C. The truncated PDGF-C is an activated form of PDGF-C.

IN THE CLAIMS:

Please amend claims 1-3, 5, 14, 18-20 and 22-24 as follows (a marked-up version of the amended claims is attached hereto):

SUB C1) 1. (Amended) A method for producing a transgenic, non-human animal overexpressing a polypeptide having platelet-derived growth factor C (PDGF-C) activity or an analog or a functional fragment having a PDGF-C activity, the method comprising the steps of:

a) introducing a transgenic DNA into a cell of a non-human animal, said transgenic DNA comprising a polynucleotide sequence operably linked to a suitable promoter, said polynucleotide encoding a polypeptide having PDGF-C activity, or an analog or a functional fragment having a PDGF-C activity;

AE b) allowing said transgenic DNA to integrate into said cell;

c) introducing said cell from step b) into a non-human animal;

and

d) allowing said cell from step c) to develop into a transgenic, non-human animal.

2. (Amended) The method of claim 1, wherein said cell of step a) is a pronuclei of a fertilized oocyte and said introducing of step c) is implanting said fertilized oocyte into a pseudopregnant non-human animal.

3. (Amended) The method of claim 1, wherein said cell of step a) is an embryonic stem cell; said integrating of step b) is integrating said DNA into a genomic DNA of said embryonic stem cell; and said introducing of step c) is introducing said embryonic stem cell into a developing embryo.

5. (Amended) The method of claim 4, wherein said promoter is selected from the group consisting of alpha-myosin heavy chain promoter, keratin K14 promoter, and insulin promoter.

14. (Amended) A transgenic, non-human animal according to Claim 9, wherein the animal is homozygous with regard to the transgenic DNA.

18. (Amended) A fertilized oocyte containing transgenic DNA that encodes a polypeptide having PDGF-C activity, or an analog or a functional fragment having a PDGF-C activity.

19. (Amended) An embryonic stem cell containing transgenic DNA that encodes a polypeptide having PDGF-C activity, or an analog or a functional fragment having a PDGF-C activity.

20. (Amended) A method for identifying a compound as a PDGF-C antagonist, said method comprising the steps of:

introducing said compound into a transgenic, non-human animal overexpressing a polypeptide having PDGF-C activity, or an analog or a functional fragment having a PDGF-C activity;

monitoring in vitro a biological activity of PDGF-C in an isolated cell from said animal; and

identifying said compound as a PDGF-C antagonist where PDGF-C biological activity is inhibited.

22. (Amended) A method for identifying a compound as a PDGF-C antagonist, said method comprising the steps of:

exposing to said compound a cell isolated from a transgenic, non-human animal overexpressing a polypeptide having PDGF-C activity or an analog or a functional fragment thereof having a PDGF-C activity;

assaying an effect of said compound on said cell; and

identifying said compound as a PDGF-C antagonist where the PDGF-C biological activity of said cell is altered.

23. (Amended) A method of screening a compound for inhibition of hypertrophy, comprising the steps of:

administering a pharmaceutically active amount of said compound to a transgenic, non-human animal overexpressing a polypeptide having PDGF-C activity or an analog or a fragment thereof having PDGF-C activity; and

monitoring cardiac development of said animal;

determining said compound inhibits hypertrophy where said cardiac development is inhibited when compared to a control transgenic, non-human animal in the absence of said compound.

24. (Amended) A method of screening a compound for inhibition of fibrosis, comprising the steps of:

administering a pharmaceutically active amount of said compound to a transgenic, non-human animal overexpressing a polypeptide having PDGF-C activity or an analog or a fragment thereof having PDGF-C activity; and

monitoring the cardiac development of said animal;

determining said compound inhibits fibrosis where said cardiac development is inhibited when compared to a non-treated control transgenic, non-human animal.

Please add the following new claims:

25. (New) A transgenic, non-human animal according to Claim 9, wherein the animal is heterozygous with regard to the transgenic DNA encoding a polypeptide having PDGF-C activity, or an analog or a fragment thereof having a PDGF-C activity.